1 VQE results Aer Estimator (With Shots)

(Full Hamiltonian) Harmonic Oscillator $\Lambda = 4$ COYBLA Max 10k Iterations

Ansatz	Tolerance	Shots	Converged runs	Mean iter	VQE min E.	σ_{min}	Δ_{min}	VQE median E.	Δ_{median}	Exact	Time
RA r1 rl	1e−01	10000	100/100	40	7e−04	2.6454e−04	7e−04	7.5e−03	7.5e−03	0e+00	00h 05m 06s
RA r1 rl	1e−01	10000	100/100	40	7e−04	2.6454e−04	7e−04	7.5e−03	7.5e−03	-	00h 05m 06s
RA r1 rl	1e−02	10000	100/100	59	0e+00	0e+00	0e+00	1.9e−03	1.9e−03	-	00h 06m 41s
RA r1 rl	1e−03	10000	100/100	70	0e+00	0e+00	0e+00	2.1e−03	2.1e−03	-	00h 07m 45s
RA r1 rl	1e−04	10000	100/100	87	0e+00	0e+00	0e+00	2.15e−03	2.15e−03	-	00h 09m 40s
RA r1 rl	1e−05	10000	100/100	95	0e+00	0e+00	0e+00	3.45e−03	3.45e−03	-	00h 10m 36s
RA r1 rl	1e−06	10000	100/100	102	0e+00	0e+00	0e+00	2.35e−03	2.35e−03	-	00h 10m 28s
RA r1 rl	1e−07	10000	100/100	119	1e−04	9.9995e−05	1e−04	2.4e−03	2.4e−03	-	00h 10m 58s
RA r1 rl	1e−08	10000	100/100	130	0e+00	0e+00	0e+00	1.8e−03	1.8e−03	-	00h 12m 02s
Ansatz	Tolerance	Shots	Converged runs	Mean iter	VQE min E.	σ_{min}	Δ_{min}	VQE median E.	Δ_{median}	Exact	Time

Table 1